SPINAL CORD CHANGES FOLLOWING A SECONDARY GENERAL ANEMIA WITH RECOVERY.

By Dr. J. W. McConnell.

A young man of about forty years had a sudden gastric hemorrhage. A few days afterward he began to have diminution of vision and became totally blind in a few days. Soon after he had numbness in his limbs, this being followed by weakness. Within a short time he presented symptoms of a postero-lateral sclerosis. Blood examination then showed the changes of a grave anemia, with first an optic neuritis followed later by an optic atrophy. In the course of several years, during which time he was under constant observation, all of the sclerotic symptoms disappeared, leaving only the optic atrophy.

Dr. Spiller stated that he was much interested in the patient, as the man had been in his service at the Philadelphia General Hospital at the time the symptoms were very grave. He was paralyzed in his lower limbs especially, so that he was unable to stand. The case was interesting in other particulars. The man said he had vomited about a quart of blood and had passed blood by the bowel, but he really did not know how much blood he had lost. Such a case as this seems to show that the spinal cord changes may be the result of anemia. This man was healthy until the loss of blood occurred. He could not have had much degeneration of the spinal cord, or he would not have recovered as he had done. Dr. Spiller thought the optic neuritis might be the result of severe anemia, as it occurs also in chlorosis, although he was not aware that it had been observed in anemia. Certain mild forms of optic neuritis are hard to distinguish from atrophy.

Dr. Dercum thought it questionable whether the fluid that fills the vessels after such a severe anemia is not itself toxic. It seems difficult to explain the optic neuritis by a mere anemia. It is also interesting to note that this man had a Babinski reflex, which has since disappeared.

Dr. C. W. Burr asked if the patient had paralysis of bladder and rectum on admission.

Dr. Burr called attention to the fact that there had been some instances of women becoming paralyzed after bleeding in childbirth in precisely that way. He had never heard of a real optic neuritis following hemorrhage.

Dr. Weisenburg stated that he knew this case very well, as the patient was admitted while he was on duty. He did not believe that he had seen a case of spinal cord change as a result of pernicious anemia recover, and that there were few, if any such instances in the literature. In the present case the blood changes were those of a grave anemia and not of the pernicious type. The occurrence of an optic neuritis is extremely rare. Only recently Dr. Weisenburg had written upon this subject and had found no similar instances in the literature. Optic atrophy, a result of hemorrhages, is not an infrequent occurrence, and is not difficult to explain. The only reference that he had been able to find in the literature regarding optic neuritis was in Norris and Oliver's book. These authors mentioned the fact that sometimes in the course of a pernicious anemia there appears what seems to be an albuminuric retinitis. It may be that in this present instance the optic neuritis may have been a forerunner of the above condition. Another possibility is that of a coincident optic neuritis as a result of another cause.

Dr. Potts thought that the relation of an anemia to optic neuritis had been shown, at least in the form of anemia known as chlorosis. A number of cases had been reported, among others by Patrick, in which the eye symptoms were such that for a time it was doubtful if the patients did not have a brain tumor. To be sure chlorosis is not a simple anemia, but it is one of the forms of that condition.

Dr. Burr called attention to the fact that this man did not have chlorosis. He had a sudden large hemorrhage and immediately after the loss of a great deal of blood he became paralyzed in both legs.

UNILATERAL OPHTHALMOPLEGIA WITH PARESIS OF VOLUNTARY UPWARD ASSOCIATED OCULAR MOVEMENT.

By Dr. J. T. Krall.

The patient was white, male, age forty, occupation fireman. He said he had a chancre seven years ago. His vision was good until six months ago, when during the night he was suddenly seized with severe pain in the head, as though something had burst. He could move his arms and legs, and there was no loss of sensation or motion in any of the extremities, and he was not unconscious. After this the right upper lid drooped and he could not move his eyes. He also had diplopia, dizziness and a feeling of dullness in the head. When examined, on June 12, 1901:

O. D., external appearance negative. O. S., ptosis of upper lid, not complete, he could forcibly lift the eyeball 3 mm. It could be moved a little down and out, but not inward and beyond the median line. Upper motion lost entirely, either alone or in association with O. D. Secondary deviation of O. D. outward. Cornea clear; pupil dilated, regular, round, 6 mm., did not react to light, accommodation or convergence.

Ophthalmoscopic Examination: O. d.; media hazy, nerve outlines indistinct, red in color. Perivascular neuroretinitis. O. S.: Cornea clear, media hazy; hyalitis. Nerve red in color; hazy; outlines veiled; vessels slightly congested and tortuous. Retina smooth, woolly, neuroretinitis. Some whitish plaques to outer side of nerve. O. D. V.=6/9 ??. O. S. V. =6/12 (by holding lid open). The sight of neither eye was improved with lenses.

Accommodation: O. D.+4.25 D. O. D.=3.25 D. Fields were concentrically contracted for form and color in both eyes about one-half the normal.

When examined on December 3, 1906, Dr. Krall noticed that the patient had a peculiar, fixed, stary, expressionless countenance. Head was thrown well back and upper lids forced open as far as possible. Examination showed O. D. normal. Excursions possible in all directions, pupil reaction normal. O. S.: The excursions were good except a trifle limited upward and inward, but in association with O. D. neither eye moved upward beyond the horizontal. All other associated movements normal. Voluntary associated movements upward not so good